

### **REMARKS**

Claims 1-5, 7-16, and 18-24 are pending in the application upon entry of the amendments. Claims 1, 7, 8, 18, and 21-24 have been amended for consistency and to better describe certain aspects of the invention. Claims 6 and 17 have been cancelled. Favorable reconsideration in light of the amendments, the Terminal Disclaimer, and the remarks which follow is respectfully requested.

#### **The Allowable Subject Matter**

The Examiner's indication that claims 11-14 contain allowable subject matter is noted with appreciation.

#### **Objection of Claims 8, 17, and 22-24**

Claims 8, 17, and 22-24 have been objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Claim 17 has been canceled. Claims 8 and 21-23 have been amended herein to cure any informalities. Withdrawal of this objection is respectfully requested.

#### **Provisional Obviousness-Type Double Patenting Rejection**

Claims 1-24 have been provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 61 of co-pending Application No. 09/760,065. The subject application and co-pending application Serial No. 09/760,065 are owned by the same entity, Engelhard Corporation. The enclosed Terminal Disclaimer renders this rejection moot.

#### **Rejection of Claims 1-8, 15-19, and 21-24 Under 35 U.S.C. §102(b) over Aston**

Claims 1-8, 15-19, and 21-24 stand rejected under 35 U.S.C. §102(b) as being anticipated by Aston (US Patent No. 2,82,891). The Applicants respectfully request withdrawal of the rejection for at least the following reasons. Aston does not disclose each

and every feature of claimed invention.

In order to establish anticipation, each and every feature as set forth in the claim must be disclosed, either expressly or inherently, in a single cited art document.

Aston fails to disclose a combination of at least one dry metal chlorite and at least one dry solid hydrophilic material selected from the group consisting of zeolites, hydrous clays, calcined clays, acidified zeolites, acidified clays, acidified calcined clays, salts, solid acids and mixtures thereof, as required in the claims. Aston relates to a chlorine dioxide generating composition. In Aston, the composition contains a solid organic acid anhydride, and does not contain any dry solid hydrophilic material defined by the claims. Thus, Aston does not disclose a dry solid hydrophilic material selected from the group consisting of zeolites, hydrous clays, calcined clays, acidified zeolites, acidified clays, acidified calcined clays, salts, solid acids and mixtures thereof. Since Aston fails to disclose each and every feature of the claims, Aston cannot anticipate claims 1-8, 15-19, and 21-24. Hence, the rejection should be withdrawn.

**Rejection of Claims 1-10, 21, and 23 Under 35 U.S.C. §102(b) over Klatte**

Claims 1-10, 21, and 23 stand rejected under 35 U.S.C. §102(b) as being anticipated by Klatte (US Patent No. 5,567,405). The Applicants respectfully request withdrawal of the rejection for at least the following reasons. Klatte does not disclose each and every feature of claimed invention.

Klatte fails to disclose a combination of at least one dry metal chlorite and at least one dry solid hydrophilic material, wherein a 30 weight percent mixture of the hydrophilic material in deionized water has a pH of no more than about 10.5, as required in the claims. The Examiner asserts that the product of Klatte has all the positive components as required in the instant claims. Applicants respectfully disagree.

Klatte discloses generation of chlorine dioxide gas from mixed beds of zeolite crystals, where the first bed comprises a zeolite that has been impregnated with an aqueous solution of sodium chlorite and the second bed comprises a zeolite that has been impregnated with phosphoric, citric, or acetic acid. Chlorine dioxide gas is

released when acid migrates from the second bed and contacts chlorine on the first bed. Klatte discloses that zeolite is impregnated with at least one of sodium chlorite, acetic acid, citric acid, and chlorine by immersing the zeolite in an aqueous solution of these compounds and that the impregnated zeolite is used to produce chlorine dioxide (column 9, lines 44-57). The zeolite that is impregnated with sodium chlorite will correspond to the first bed.

The zeolite solution in Klatte does not have a pH of no more than about 10.5, as required in the claims. Chlorine dioxide is generated by contacting a chlorite with an acid. One skilled in the art would understand that if the zeolite has a pH of less than 10.5, the solution immediately produces chloride dioxide when mixed with sodium chlorite and then the resulted impregnated zeolite cannot be used to produce chloride dioxide. Thus, one skilled in the art would have understand that the zeolite solution in Klatte should not have a pH of no more than 10.5. Contrary to the teaching of Klatte, the claimed invention requires that at least one dry solid hydrophilic material, wherein a 30 weight percent mixture of the hydrophilic material in deionized water has a pH of no more than about 10.5. Since Klatte fails to disclose each and every feature of the claims, Klatte cannot anticipate claims 1-10, 21, and 23. Hence, the rejection should be withdrawn.

#### **Rejection of Claims 1-4, 6, 7, and 15-24 Under 35 U.S.C. §103(a)**

Claims 1-4, 6, 7, and 15-24 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Aston. The Applicants respectfully request withdrawal of the rejection for at least the following reasons. The cited art does not teach or suggest all the features of the claimed invention.

To reject claims in an application under §103, an examiner must establish a *prima facie* case of obviousness. A *prima facie* case of obviousness is established by a showing of three basic criteria. First, there must be some suggestion or motivation, either in the cited art or in the knowledge generally available to one of ordinary skill in the art, to modify or combine cited art teachings. Second, there must be a reasonable

expectation of success. Finally, the cited art must teach or suggest all the claim features. See MPEP §706.02(j).

In addition, the teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the cited art and not based on applicant's disclosure. See *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

As mentioned in the previous section, Aston does not teach or suggest each and every feature of the claims. In particular, Aston fails to teach or suggest a combination of at least one dry metal chlorite and at least one dry solid hydrophilic material selected from the group consisting of zeolites, hydrous clays, calcined clays, acidified zeolites, acidified clays, acidified calcined clays, salts, solid acids and mixtures thereof, as required in the claims. Consequently, it would not have been obvious for one skilled in the art to practice the invention based upon Aston. In view of the foregoing, the rejection should be withdrawn.

**Rejection of Claims 1-10, 20, 21, and 23 Under 35 U.S.C. §103(a)**

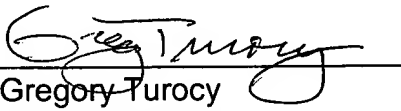
Claims 1-10, 20, 21, and 23 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Klatte. The Applicants respectfully request withdrawal of the rejection for at least the following reasons. The cited art does not teach or suggest all the features of the claimed invention.

As mentioned previously, Klatte does not teach or suggest each and every feature of the claims. In particular, Klatte fails to teach or suggest a combination of at least one dry metal chlorite and at least one dry solid hydrophilic material, wherein a 30 weight percent mixture of the hydrophilic material in deionized water has a pH of no more than about 10.5, as required in the claims. Consequently, it would not have been obvious to one skilled in the art to practice the invention based upon Klatte. In view of the foregoing, the rejection should be withdrawn.

Should the Examiner believe that a telephone interview would be helpful to expedite favorable prosecution, the Examiner is invited to contact Applicants' undersigned attorney at the telephone number listed below.

In the event any fees are due in connection with the filing of this document, the Commissioner is authorized to charge those fees to our Deposit Account No. 50-1063.

Respectfully submitted,  
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